# IB Research Notes

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In this issue of *IB Research Notes* Richard Caffyn and James Cambridge of IBRU look at methodological concerns involved in research with particular reference to Candice Reimers' article in the *International Schools Journal* (Vol. XXIV, No. 2, 2004), which investigates the impact of the Middle Years Programme on diploma students. The methodology used by Reimers is critically discussed and used to problematize statistical tests and matched sample research. Dr John Hare offers a response to the paper, addressing the importance of methodology and the need to question critically the validity of data when drawing conclusions in research.

This issue also includes George Walker's paper about research and the IBO strategic plan, which was delivered at a joint seminar of IBRU and the research committee in May 2005.

We are looking at reviewing the existing structure and content of *IB Research Notes* and would therefore appreciate some feedback from our readers. We sent out a questionnaire during the last issue and include it in this issue to gain a greater response. Please spare a few moments to reflect on your views and use of the publication and respond to the short questionnaire. Thank you.

We are always very keen to hear about prospective articles for *IB Research Notes*. If you are interested, please contact me at the IBRU e-mail address.

Richard Caffyn Editor of *IB Research Notes* Head of Research Support and Development

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## **Feature Article**

Richard Caffyn and James Cambridge are members of the International Baccalaureate Research Unit (IBRU), University of Bath, UK.

# "From Middle Years Programme to Diploma Programme": a critical response to Candice Reimers

## Richard Caffyn and James Cambridge

#### **Abstract**

Reimers' study asks some interesting questions about continuity between two IB programmes. However, the authors of this article propose that the methodology underlying Reimers' attempts to answer those questions is flawed, and the inferences she draws from her data are not valid.

### Introduction

In 2004 Candice Reimers published a report in the *International Schools Journal* on her attempt to establish whether there is a relationship between students' participation in the IB Middle Years Programme (MYP) and the achievements of the same students in the IB Diploma Programme (DP). Her research follows the "agricultural botanical" paradigm (Hopkins, 1989): it addresses differences between two populations that are assumed to be matched save for the treatment that the experimental group has received and to which the control group has not been exposed.

# Methodology

The research uses statistical tests, as well as schools' background data, to compare the examination results of MYP/DP students with those of non-MYP/DP students. There are methodological concerns with this approach. The study aims to investigate the impact of the MYP on DP students. However, the study also discusses the reasons why schools adopt the MYP (Reimers, 2004: 11). We propose that this is another area for concern, because it is unclear how it is related to the investigation of students' examination results. These are two different investigations, but Reimers seems to ignore the complexities of bringing the two together.

Issues are raised by Reimers' choice of methodology (ie philosophy informing research design) and also by her methods of data collection and analysis. It is unclear what philosophical arguments support Reimers' choice of research design, and to what extent she has critically engaged with other, contrasting methodological viewpoints.

There is some discussion of the data collection method chosen, of the problems encountered in collecting the data, and of those students who fail to complete their IB programme (ibid. 13). However, it would have been useful to include in the study an explanation of how the survey was administered, how the schools were selected and whether there was any piloting process.

#### Literature

Two points for discussion may be identified in Reimers' treatment of literature: first her use of methodological texts and how this informs her selection of investigative tools; and second the discussion of literature that underpins her critique.

There seems little attempt by Reimers to identify the study with a well-established methodology. There is an implicit assumption that this study is located in a positivist quantitative paradigm but she does not state why she has adopted this methodological position. In particular, there is no discussion of the published literature on researching within a multi-variable project; the references in the bibliography fail to justify her selection of a particular methodological approach; and there is no discussion of triangulation, validity and reliability issues. It appears that her methodological stance is accepted as valid from the outset and there is no attempt critically to engage with the issues or problems inherent in her approach. This is crucial as she concludes her report with sweeping generalizations based on a limited and methodologically uncritical investigation.

There is little evidence in Reimers' report of critical engagement with the existing literature on, for example, curriculum progression and continuity, the development of learning, and issues concerning transition. She makes ineffective use of her bibliography to initiate any real debate, which is disappointing as a thorough and critical discussion should be pivotal to the report. Instead, her generalizations are taken from a few citations, and she makes seemingly random connections between a limited discussion of pedagogical theory and the DP model. In following Reimers' connections between her use of theory and the conclusions of her study, there appears to be an absence of critical examination and discussion.

Reimers cites some important references on transition between IB programmes in her bibliography, but these are not discussed in the text. Millikan (2001: 5-6) argues that there are complexities with respect to making valid comparisons between international schools, yet Reimers ignores this kind of fundamental theoretical view in her study. There is a limited critical discussion of the extended essay but little else that utilizes the relevant literature. This in itself is a serious omission and one that raises questions about Reimers' use of literature both to inform and examine the results of her study. Hayden and Wong (1997) found that it was unclear how the DP developed attributes in former MYP students. Hayden and Wong discuss the problematizing of this but Reimers does not mention it, even though she cites the article in her bibliography.

# Sample

Reimers' sample is problematic both for the study and for any conclusions drawn from it. In describing her sample, she states that "375 schools participated, providing data for over 400 students" (Reimers, 2004: 13). This suggests that data describing no more than one student per school were collected, and in the majority of cases from schools offering the DP only. The numerical data describing the sample give rise to a number of questions.

- ◆ Are the same students enumerated in Table 3 "Correlation between MYP and total Diploma Points" (Do they have MYP? N = 620; Total points, N = 622) and Table 4 "Correlation between years with MYP and total Diploma Points", (Total points, N = 622 and Student years with the MYP, N = 622 and 637)?
- What is the reason for the variations in these numbers?
- Does the sample represent one single cohort of DP students participating in the same examination session, or do they form separate cohorts from different examination sessions?

In her discussion of the findings, Reimers suggests that the study is limited in its sample size. "Since the MYP has only been in existence for 11 years, there were very few schools that had students complete the entire MYP (five years) and then Diploma Programme (two years) resulting in a very small sample size" (ibid. 16). She also states that only six MYP schools participated in the study from 1,300 schools contacted. With such a large heterogeneity in the sample population—"Twenty-eight different countries were represented in the data" (ibid. 13)—there is a need for a larger sample (Bryman, 2004: 99). Yet neither the composition of the sample population nor the way the sample has been constructed are discussed or critically appraised, except briefly in the conclusion (Reimers, 2004: 16).

Because only six schools used both MYP and DP, have these students then formed a sub-sample in any of the analyses undertaken?

These manifest limitations do not seem to have deterred Reimers from drawing generalized conclusions. Her sample raises questions of validity and reliability. There appears to have been no attempt critically to discuss the methodological issues: the sample size, the sampling method used, and the data for students who do not complete the programme.

Reimers' approach assumes that the populations are matched, however there is no evidence to suggest that she has attempted to construct matched samples for comparison. She refers to a control group, but does not discuss its structure, size and use. The purpose of the control group is to eliminate other explanations of a causal finding (Bryman, 2004: 35). The internal validity (ibid. 28–9) of the investigation is challenged, not only by the numerous variables that Reimers herself admits (Reimers, 2004: 16) could have an impact on the outcomes but also by a problematic imbalance in terms of size and composition between the two groups. There are six schools in the experimental group, but as many as 375 schools in the control group. Reimers does not explain how the sample for the control group was recruited, nor does she discuss the problems addressed by the sampling method. She appears to have used an opportunity sample without reference to the construction of matched samples.

Reimers (ibid. 11) states that "the survey was available in all three official languages of the IBO". It is not clear whether any variations in outcomes would be expected had the sample been disaggregated by language, nor is it clear whether any were explored. Reimers is silent about the implications of this statement and enters into no discussion about issues arising from it.

# Selection of statistical tests employed

In this section we discuss the nature of the variables used in the data analysis, the comparisons being made, and the fitness for purpose of the statistical tests used by Reimers.

Four types of variables, each with particular properties, may be found in quantitative educational studies (Bryman, 2004: 225-6):

- interval or ratio variables, with the distance between the categories being identical across the range
- ordinal variables, whose categories can be rank ordered but where the distances between the categories are not equal across the range
- nominal or categorical variables, whose categories cannot be rank ordered
- dichotomous variables, containing data with only two categories.

What types of variables may be identified in Reimers' data? The distinction between variable types is important because the valid application of statistical tests depends on certain parameters being met. Two statistical tests have been employed in Reimers' study: Pearson's product moment correlation coefficient and t-test. These are parametric tests that assume normal distribution of data comprising interval or ratio variables, among other parameters (Field, 2000: 37–8). We propose to examine Reimers' data, table by table, to elucidate what comparisons are being made, by which statistical test performed on which types of variables.

#### Table 1

In Table 1 Reimers presents Pearson's product moment correlation coefficient data purporting to show "MYP influence on the individual components of the Diploma Programme". We interpret this as indicating that Reimers conducted a longitudinal study on the same cohort of subjects who followed the MYP and DP sequentially. This raises the following questions.

- In what years did the cohorts follow these programmes?
- Do the data for the DP come from the same examination sessions or from different sessions?
- What precisely are the variables being correlated here?

One variable appears to be the number of points awarded to each student by "Group". Is this by subject group or by academic subject? The DP model (the "hexagon") consists of the core curriculum (extended essay, theory of knowledge and creativity, action, service) and subjects selected from six groups. However, there are options; "instead of a group 6 subject, a student may select an additional subject from groups 1 to 4, or further mathematics SL, or computer science from group 5" (IBO, 2005). It is unclear how Reimers has treated the data in cases where students have selected more than one subject from the same group—has she aggregated the points in some way, or has she computed the mean point scores per group? Or does Reimers' "Group 6" consist of a mixture of subjects from groups 1–4, in which case by what criteria did she assign subjects to this group?

The other variable in the calculation of the correlation coefficient is "MYP influence". What does this mean in the context of Table 1? How many categories are there relating to the MYP variable? It is assumed that it is a dichotomous variable comprising "DP candidates with MYP experience" versus "DP candidates without MYP experience". Dichotomous variables are ambiguous because they have only one interval so "it is probably safest to treat them for most purposes as if they were ordinary nominal variables" (Bryman, 2004: 226). The numerical values assigned to nominal variables are arbitrary, and do not indicate that one category is bigger or smaller than the other. Because variables describing "MYP influence" may be interpreted as nominal or categorical variables they cannot be used with validity in a parametric test such as Pearson's product moment correlation coefficient. On these grounds, we propose that the data presented in Table 1 and the inferences drawn from them are not valid.

#### Tables 2 and 3

What do Table 2 "MYP and total Diploma points" and Table 3 "Correlation between MYP and total Diploma points" represent? Does Table 2 represent "a correlation between a student participating in the MYP and their total Diploma points" (Reimers 2004: 13) or is it a t-test, presenting the calculation of difference between the means of two cohorts? From its appearance, it is difficult to determine which interpretation is valid. According to Reimers "it is not surprising to find that there are no differences in the final Diploma score between students who participated in the MYP and those who did not" (ibid: 13). This statement suggests that Table 2 refers to differences between means calculated by t-test and not a correlation calculated by Pearson's product moment correlation coefficient. As with the evaluation relating to the interpretation of Table 1 above, it may be argued that the data presented in Tables 2 and 3 are not valid because nominal or categorical variables cannot be used with validity in a parametric test such as Pearson's product moment correlation coefficient or t-test. However, it is difficult to determine what calculations are being made in these examples. Is Reimers proposing a comparison between the total diploma points scores of two cohorts of students comprising "DP candidates with MYP experience" versus "DP candidates without MYP experience"? If this is the case, how many students are in each cohort? According to Table 3, in the column entitled "Do they have MYP?", "N = 688". Should this be interpreted as indicating that there are 688 students in the category consisting of DP students with MYP experience? This appears to contradict Reimers' statement under the heading "Sample description" that "in total 375 schools participated, providing data for over 400 students, 60 of whom participated in both the MYP and Diploma programmes" (ibid). While 688 subjects is evidently "over 400", there is no reference in either Table 2 or Table 3 to the 60 students with experience of both the MYP and DP. On these grounds, we propose that the data presented in Tables 2 and 3 and the inferences drawn from them are not valid.

#### Tables 4 and 5

Table 4 presents "Correlation between years with MYP and total Diploma Points". In principle we accept that, unlike the preceding comparisons, this correlation may have validity—"years with MYP" may be defined as a ratio variable with five categories at equal intervals because the MYP "is a five-year programme" (IBO, 2005). However, if Reimers' statement is true that the sample consists of 60 subjects with both MYP and DP experience, she does not indicate the size of the cohort in each year of the MYP. It is not clear what impact this has on the sizes of the subsets in this sample, nor is it clear how this sample size affects the validity of inferences drawn from this calculation. Sixty subjects distributed among five categories would suggest a mean cell size of 12, assuming equal distribution in each category. This would imply that four-fifths of the students participated in but did not complete the MYP. Hence, what does the term "years with MYP" mean? Who are the students who followed the MYP for fewer than five years, and why? Did they withdraw from the MYP before completion or did they join the programme late (ie after the first year) before moving on to the DP? Reimers offers no explanation. Under the heading "Student years with the MYP" in Table 4, "N = 619". Does this number represent an aggregated sum of 619 students with MYP experience? There is no indication given of the cohort size for each of the five "years with the MYP" intervals. Does this indicate that Reimers' statement that the number of students "in both the MYP and Diploma programmes" is 60 (Reimers, 2004: 13) is inaccurate or misleading? We propose that, unless Reimers can account for the discrepancy in numerical data, inferences drawn from Table 4 are not valid. We also propose that inferences drawn from Table 5 "Correlations between years with MYP and score in Diploma components" are not valid.

#### Table 6

Table 6 presents "Comparison between MYP vs. no experience and final Diploma points within the same school". It is unclear what comparison is being made. Is it a t-test of differences between the mean final diploma points scores of two groups—one with MYP experience, and a control group without MYP experience? In what way does Table 6 differ from the content of Table 2, which was interpreted as also presenting the results of a t-test between mean diploma points scores of MYP and non-MYP cohorts? The key difference appears to lie in the legend "at the same school". However, if there were 60 students in the sample who "participated in both the MYP and Diploma programmes" and "came from six different schools" (ibid.), why are there not six discrete calculations presented, one for each school? It is difficult to ascertain how Table 6 presents a summary of data disaggregated by school. On these grounds, we propose that the data presented in Table 6 and the inferences drawn from them are not valid.

# Discussion of conclusions

It is important critically to discuss the conclusions proposed by Reimers. However, there is one fundamental factor that she fails to mention—the question of variables. Millikan points this out succinctly by suggesting that there is an issue of provision and school structure that makes comparison complex. "It is impossible to make direct, valid and/or reliable comparisons between schools" (Millikan, 2001: 6). Reimers makes no attempt critically to engage with Millikan's arguments, even though she refers to his work in her bibliography. Neither does she explore the variables that are encountered within her data regarding the background, teaching and structure of each school. These are crucial omissions, especially when she subsequently makes profound claims for her research results. Reimers proposes that there are other factors that could influence diploma success, but does not bring these into a critique of her own conclusions. She states very broad conclusions, and then contradicts her claims by citing the very small sample size and the "hundreds of factors" (Reimers, 2004: 16) that can influence DP success. A discussion of such factors should be pivotal to the article, not left as a brief aside after the conclusion. This in itself undermines Reimers' whole investigation and the claims it makes.

Reimers lists five conclusion points, which we now propose to discuss. (For what follows see page 16 of Reimers' report.)

a) "Schools adopt the MYP because they believe that it holds many benefits including a strong pedagogical foundation, unification of Middle and Upper Schools, and helping Diploma candidates."

We interpret this statement as a conclusion drawn by Reimers based on data collected from MYP schools. It is an isolated statement that, juxtaposed with the other points, seems to be unrelated to the whole study. The reasons for its inclusion are unclear—is Reimers suggesting that there is a connection and, if so, what might the connection be? Assuming there is a connection, she appears to be arguing that schools are under a misapprehension that the MYP assists transition to the DP. It is unclear whether this argument is based on primary or secondary sources. In discussing the issue of school funds used for staff development for IB programmes, Reimers (ibid: 16) cites one source—Miller, 2003—to support the statement. This, according to the references, was a personal interview between Reimers and Miller. Why is it cited as a reference (and not as part of the data collected in the inquiry), and what relevance has the interview to the overall methodology? Is it used to contribute to methods triangulation (Bryman, 2004: 454)? Reimers extrapolates from the interview to suggest that other schools do the same, but with no further exploration evident, it is difficult to justify this assertion.

- b) "Participation in the MYP does not help Diploma candidates score higher on the individually scored Diploma components: Groups 1–5 and TOK. In the case of Group 5, MYP participation can have a small negative influence."
- c) "Participation in the MYP does help Diploma candidates score slightly higher on the Extended Essay."

Conclusions such as these, on the basis of a small sample and with Reimers' own view that there are many other variables at work, are problematic. There are glaring omissions from the study. Specifically, Reimers fails to carry out a critical examination of the results and of the methodological construct. A more in-depth discussion and examination of other factors, such as "the quality of education within (the student's) respective institution" (Reimers, 2004: 15), would have been welcomed. Reimers acknowledges this, but makes little or no attempt to limit the scope of her concluding generalizations. With such a limited sample size some kind of triangulation would have enhanced the validity, especially the construct validity, of the study.

d) "Participation in the MYP does not help Diploma candidates in their overall diploma score."

This could be restated as a null hypothesis that there is no difference between the academic achievements in the DP of MYP and non-MYP students. A methodological approach would be to use data to falsify the null hypothesis that there is no difference in outcomes in response to the two treatments. Reimers admits that the sample size is a concern but there is no discussion of external validity (Bryman, 2004: 29). Similarly, with her acknowledgement of the possible impact of other factors, there is no discussion of construct validity with respect to the methodology. Reimers' sweeping conclusions fall into the trap of generalizing from limited and problematic data in an attempt at sensationalism and positioning rather than critical discourse. A study such as this should propose questions that need to be explored further, rather than offering weak conclusions. Reimers suggests the need for greater exploration of the factors affecting the DP students' success, and this kind of investigation could act as a stimulus to further in-depth and critical study. However, there is no discussion of other studies into the DP (Millikan, 2001), nor of other possible transitions between programmes, for example, from the International General Certificate of Secondary Education (IGCSE) to the DP.

e) "The longer a student has participated in the MYP the lower their score in Group 1 (Language A1), Group 3 (Individuals and Society) and Group 5 (Mathematics)."

This conclusion raises a number of unanswered questions. Are we to interpret this as a longitudinal study? If so, where is the discussion of this in the methodology section? Where are the data for this inference? As we discussed earlier, how have the cohorts been constructed in terms of years of participation in the MYP? How have the 60 students been divided among five cohorts?

#### Conclusion

Reimers' study sets out to ask some interesting and important questions about continuity between two IB programmes. However, the methodology underlying the way the author has attempted to answer those questions is flawed. The parametric statistical tests selected for the task are not fit for purpose and the "results" generated are therefore not valid. Generalizations are made from very limited and even suspect data. The author has not made explicit the exact nature of the variables under study, and exactly what comparisons are being made.

In conclusion, we invite Reimers to address the following questions.

- What variables are represented in each table?
- Are they categorical, ordinal or ratio variables?
- Do the variables show normal distribution?
- What justification is made for selection of these particular statistical tests (ie Pearson's product moment correlation coefficient and t-test in this context)?
- Exactly what comparisons are being made in each table?
- What philosophical arguments support the choice of methods and how has the author critically engaged with different methodological viewpoints?
- How does the literature used in the bibliography and other studies into the MYP underpin the arguments and discussion?

The IBO welcomes any constructive criticism of its programmes. Indeed, the issue of the transition of students between programmes is a research question highlighted by the academic directorate in response to the generation of the IBO strategic plan. However, Reimers' study represents a wholly inadequate attempt to address the issue.

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# Response to the paper by Richard Caffyn and James Cambridge

Dr John Hare is Deputy Head of Science at a UK secondary school. Formerly a research scientist in the pharmaceutical industry, he has experience of teaching science both within the UK and as part of IB education programmes, the latter at the International School of Basel. He is currently completing an MPhil on holistic education in the MYP, and lives in Surrey in the UK with his wife and two children.

The paper presented previously by Reimers sought to answer a fundamental question about how well the IB Middle Years Programme (MYP) prepares students for the Diploma Programme (DP). It is a question that is raised justifiably by educators implementing the MYP, and consequently is of considerable interest. In view of the importance of the topic, the detailed review of the paper by Caffyn and Cambridge is timely.

Caffyn and Cambridge identify considerable concerns with the content and conclusions within Reimers' paper. It would be facile to claim that these concerns are designed to refute the claims of Reimers for the purpose of protecting the position of the MYP as an educational programme. This would be sustainable, were it not for the fact that Caffyn and Cambridge have approached their critique from the sound position of reviewing systematically the research methodology used and examining whether the conclusions presented can be supported from the evidence obtained. The comments they make and the questions they ask are appropriate.

The language of the researcher is evident throughout the critique but careful reading is rewarded, which is maximized when a copy of Reimers' paper is to hand. Superficially, the approach taken by Reimers is attractive. However, close and systematic scrutiny of the experimental design, the nature of the data collection, its statistical treatment and the validity of the conclusions drawn raises major concerns.

The authors provide a timely reminder of the importance of having a full understanding of the methodological issues involved before embarking on a research programme, and of using appropriate analytical techniques to review the gathered data. Furthermore, they remind us of the need to question critically the validity of the data obtained and whether conclusions are in line with the evidence.

The concerns raised by Caffyn and Cambridge about the validity of the conclusions presented in Reimers' paper are well made and justifiable. More detailed and more effectively designed research has to be completed before any conclusions can be drawn about the contribution that the MYP makes to students progressing through the DP. It is, nevertheless, an area of research that should be undertaken in the future. It is interesting to note that no mention is made in either paper of the impact made by other pre-diploma courses on student success in the DP. This is an area that would benefit from further study and would also provoke further interest and comment. The overall conclusion that can be drawn from both papers is that we remain unable to make any comment on the contribution of the MYP to success at diploma level. Consequently, administrators and educators alike would be well advised to await the outcome of future studies before reaching conclusions about the relationship of the two programmes.

The authors raise legitimate questions at the end of their critique. Perhaps one additional but wider question needs to be asked.

In making comparisons between different cohorts of students, how can matched sample populations be obtained that will give us reliable data on a wide range of student progression and programme improvement issues?

This is an opportunity to establish research methodologies and data collection approaches on a global scale that would benefit all those engaged in international education.

# Research and the IBO Strategic Plan

This is the text of a speech given by George Walker, Director General of the IBO, as the introduction to a seminar at IBRU on 13 May 2005.

I have checked back over the past five years and my track record on supporting research, at least as measured by my annual 360° appraisal, is pretty good with an average score of 6.2 out of 7.0 for that particular question. But one would have to be unusually perverse not to support research in an organization like the IBO, and the creation of IBRU—with the strong support of Jeff Thompson and the University of Bath—will be one of my most satisfying achievements as director general.

Any serious organization must be committed to studying how the world is changing and how its product—international education, in our case—must change to keep in step. In practice, I think our research falls broadly into three related categories: the nature and scope of international education; its practical implementation in the classroom; and the particular impact of IB programmes. And, indeed, IBRU is involved in each of these areas as we heard in this morning's project presentations.

I believe research must make contact with the big issues. However thin the slice we see—the published paper, the conference presentation, the PhD thesis—we must be able to connect it in our minds to an issue of real significance. My son is a research biochemist and has become skilled at explaining why his area of interest, namely the way cells send messages to each other, is of real importance to the everyday life (literally) of you and me. We are not very good at that in education.

Of the many big issues concerning education today, the one of greatest significance to the international educator must be how best to educate global citizens rather than (perhaps "as well as" would be more apt) national citizens. A growing global awareness has to be reconciled with new, sharper perceptions of ethnicity as old empires collapse, to grow again in new forms with unlikely groups claiming sovereign status, a distinctive cultural heritage and a unique language.

The celebration of the 60th anniversary of the end of the war in Europe has illustrated this new ambiguity. The old enemy, Germany, now helps to keep the peace at the heart of a European alliance. Russia has lost its empire despite, it insists, having won the war. The tiny Baltic states are exposing Russia as the new villain that expelled one totalitarian regime only to replace it for 50 years with one that was equally repressive. Aged, be-medalled old men sit in wheelchairs wondering if they are still heroes.

If education for global citizenship is the title of the book, then we can readily suggest a number of chapter headings, the following being my own personal selection.

- What role should international education play in state schools that have become the new centres of multiculturalism?
- Are we satisfied that the western, humanist model of international-mindedness, as developed by the IBO, is appropriate across the globe?
- What lessons for the IBO are contained in the decline of respect for global institutions like the United Nations (UN) and the United Nations Educational, Scientific and Cultural Organization (UNESCO)?
- Is international education appropriately regarded as a preparation for leadership since opportunities seem to be rather exclusive?
- How should the IBO respond to new technological opportunities to widen access without compromising its values?

- How should the IBO encourage the growth of other initiatives in the field to provide a healthy challenge to its near-monopoly in international education?
- Finally, where do we stand on the pragmatic-visionary axis that has always measured the IBO? For example do we perceive a foreign language as a practical tool or (in a phrase recently suggested to me) as a "homage to another culture"?

You will remember that the strategic plan was approved by the Council of Foundation in April 2004 and during the months that followed each department organized a workshop to enable it to formulate its own goals. IBRU listed eight such goals and I was impressed by the way the presenters this morning related each project to one or more of those goals.

The organizational goals for 2006–8, approved by the Council of Foundation in May 2005, include this specific reference as goal 17.

• Develop and implement a corporate structure for research in collaboration with regional offices, in order to respond to regional needs and to take advantage of local initiatives for collaboration.

I take every opportunity to remind members of council and the trustees of the IB fund board of the vital importance of research to the well-being of the organization.

Let me return to the strategic plan itself because there is a danger that each annual interpretation will take us further away from its overarching message, which is one of managing growth. You may remember that during the early discussions we came up with the rather controversial "impact function". This related the potential impact of an IB experience (let's call it that for the moment) to three variables:

- 1. the educational difference, D, that the IB experience will make in the situation under review
- 2. the number of students, N, who will be affected
- 3. the ease, E, with which the experience can be implanted successfully in the school district, state, or country concerned.

N and E are fairly easy to grasp but not so D. What difference does an IB experience make and what evidence have we got for it? The same question arises during discussions about widening access, one of the key themes of the strategic plan. Access to what: to an IB programme, to a modified version of an IB programme, to the teacher training that prepares teachers for an IB programme or for something different that somehow replicates the "IB experience"? If we are considering alternative models in order to widen access, how do we know that a valid IB experience has been achieved?

This is not the time or place to explore this in detail, but the starting point will clearly be the IBO's mission statement. The next stage of deconstruction is already being made in the development of a learner profile that can be derived from each of our three programmes. I believe the "IB experience" can be divided into five broad elements:

- critical thinking skills
- international-mindedness
- civic responsibility
- an holistic curriculum
- strong ethical values.

Others may offer different components, but my question remains valid: what is distinctive about the IB? The practical answers to this question (determining the nature of the learning that takes place in IB schools) will decide how successfully the IBO can turn itself from a very successful niche organization into an influence upon the mainstream of education around the

world. **Why** are we different; and **how** are we different? Convincing answers to these two questions will determine the nature of our programmes and our assessment; they will influence the way we encourage the development of teachers; they will give us the right to solicit support, including financial support, for our endeavours.

These are the questions that should underlie our research effort as, indeed, they do. The five projects presented this morning—distance learning in Finland; intergenerational learning; school to university transition; the international instrument of ISA; and practitioner research—all relate directly to the issues I have been discussing in the last few minutes.

So, with that as background, let me now open up the seminar for discussion ...

## **IBRU News**

IBRU colleagues have been taking part in international conferences over the first quarter of the year. James Cambridge was a guest speaker on intergenerational learning and assessment issues at a creativity, action, service (CAS) workshop for IB Diploma Programme coordinators, held at Munich International School, Germany (11–13 February 2005). Richard Caffyn attended the Nordic Network of English Speaking Schools Conference in Copenhagen during March and presented at two sessions, one on the work of IBRU and the other on his research into micropolitics. The Head of IBRU Jeff Thompson presented at international conferences in Thailand, Taiwan, Shanghai, Mauritius, Prague, Singapore and India. Colleagues from IBRU will be presenting at the European Council of International Schools (ECIS) Conference in The Hague during November 2005.

Anna Simandiraki has recently published the following article in the *International Schools Journal*:

• Simandiraki, A. (2005) Of Onions and Ruins: Knowing Cultures Through their Heritage? *International Schools Journal* Vol. XXIV, No. 2, pp. 40–48.

On 13–14 May 2005, IBRU hosted the annual meeting of the research committee, where committee members from all over the world met together to look at current IBRU research projects and discuss research proposals from all regions of the IBO.

# **Practitioner Research Project**

The Practitioner Research Project (PRP) is at a major stage where pilot questionnaires are being sent out to a representative sample of 60 IB schools. Three differentiated questionnaires will target specific groups within these schools:

- practitioner researchers
- non-researcher practitioners
- management.

This will assist us in the formulation of the main research instrument to be used later in the year.

# Feedback Questionnaire (reminder)

We would greatly appreciate your feedback on *IB Research Notes* as we aim to review and redevelop its structure during 2005. The questionnaire (included in the last issue) was aimed to elicit response from our readers. Please do take time to write a few comments if you have not done so yet, so that we can use your ideas and feedback in the publication's development. Please e-mail your responses to the following questions to Richard Caffyn at: richardc@ibo.org.

Many thanks.

# Questionnaire

What aspect	s of <i>IB Research</i>	<i>Notes</i> could	be improved	?	
	_				
How could <i>I</i>	B Research Notes	s develop or	change?		
How could i	t become more u	ıser-friendly	?		
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# Research Noticeboard

### Journal of Research in International Education

Information about this journal can be found at: http://www.sagepub.co.uk.

#### Research literature

Lam, H and Selmer, J (2004) "Perceptions of Being International: Differences between British Adolescents Living Abroad and those at Home". *International Education Journal*, Vol. 5, No. 3, 360–73.

British adolescents living in Hong Kong and British adolescents living in the United Kingdom formed the two samples of adolescents who completed Hayden, Rancic and Thompson's (2000) 32-item instrument. Instead of following the original authors' approach to the analysis of the instrument, a more comprehensive technique was adopted. The data were first factor analysed to reveal new factor structures that were different from those in the original instrument. Subsequent MANCOVA and ANCOVA found that there were comparative differences in all of the new variables between the British expatriate adolescents and local British adolescents. The differences found in this study are concerned with international awareness, international mobility, flexibility, respect for others and national identity, which British expatriate adolescents believed were the factors of being international.

Paris, P G (2003) "The International Baccalaureate: A Case Study on why Students Choose to do the IB". *International Education Journal*, Vol. 4, No. 3, 232–43.

The International Baccalaureate (IB), a global curriculum and associated assessment processes, is spreading rapidly throughout many countries of the world, presenting itself as an alternative to local assessment and curriculum offerings. It thereby offers a clear example of the globalization of knowledge and the knowledge industry. Meanwhile at the local level in South Australia both public and private schools are coming to terms with the concept of educating for the twenty-first century with perceptions of being part of a global village and opting for the chance of educating world citizens. It would seem that many schools perceive the adoption of the IB curriculum as one means of achieving this. In this research study, 60 year 10 students from a public (state/government) and private (independent) school, from one Australian city, took part in an investigation to determine why they chose to pursue the IB Diploma Programme in their final two years of schooling.

Both these articles can be found at the following web site: http://ehlt.flinders.edu.au/education/iej/articles/mainframe.htm.

#### International education research database

An updated version of the international education research database has now been launched and currently contains nearly 3,000 research articles on international education and International Baccalaureate programmes. The

international education research database can be accessed at http://www.ibo.org. Access the shortcuts menu to go to the research pages, which provide a link to the searchable research database.

## IBO public web site

The IBO's main web site (http://www.ibo.org) provides general information about the organization and its programmes.

## Online curriculum centre

The online curriculum centre (http://occ.ibo.org) is available to all teachers in IB schools that subscribe to the site. The online curriculum centre is a valuable source of information for those considering research related to the IB programmes.