### Action research report

### **IB Journal of Teaching Practice**

# Sustained student action in the PYP: A multi-staged action research project

TOSCA KILLORAN, JEFF HOFFART, ADAM BOURRET

#### INTRODUCTION

The school that is the centre of this research is a growing community school in a quiet, green city that was once home to the capital of West Germany. The school's community consists of members from the United Nations as well as other non-governmental organizations (NGOs) and large corporations. The school is composed of 704 students from three to eighteen years of age and the demographics are diverse, with 61 different nationalities represented, 15% of which are German citizens. The language of instruction is English, but the school provides support for the host country's language in the form of German classes once per day. English as an Additional Language (EAL) supports the diverse EAL student body. The school has been authorized as an IB World School for 11 years and implements the Primary Years Programme (PYP), Middle Years Programme (MYP) and Diploma Programme (DP).

The Primary Years Programme Coordinator (PYPC) works with the teachers to embody the IB learner profile attributes, and weekly meetings are often devoted to reflection on all aspects of the planning and teaching processes and practices. During one of these reflective meetings the staff decided that student action was not strongly evi-

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The purpose of this study was to examine authentic studentgenerated action within an IB school. The study aimed to examine and reflect on action as part of the planned, taught and assessed curricula. The study was conducted at an international school in Germany using an iterative process of data collection on a convenience sample of 36 PYP students and 7 PYP teachers. Reflective analysis of the data collected contributed to the final understanding of sustained action within the learning community. Instruments that included qualitative surveys, checklists and reflective journaling were used to collect data specific to the various research sub-questions. We determined a need for a definition of action and discovered that students' action was rudimentary and required more support - in the form of an action phase document and explicitly taught skills - in order for it to be sustainable. Furthermore, we developed a resource website that supported teachers in fostering student-led sustainable action. Future research could entail whole-school data collection inclusive of the MYP and DP programmes in order to develop a cohesive definition, philosophy and curricula that support sustainable action at the school.

denced within our planner documentation. Additionally, when it did appear in the planner it was really a "transfer task", which learners used to show their understanding in a different context (Wiggins & McTighe, 2005, p. 153).

Several teachers, intrigued by this trend, began to engage in a pedagogical debate. In Making the PYP happen (2009), the IB states that that action will "make a difference in and to the world" (p. 25) and this is what we envisioned enabling our students to do. We debated if the transfer of knowledge equated to student-generated action. Action seemed to have become a pedagogical conundrum. As individuals, we struggled with how we defined action, but as a group we were united in the understanding that the concept of action is a fundamental component that underpins the PYP and, most importantly, is linked directly with the types of learners we want to develop. From these discussions, we banded into a small research team, inspired by the words, "The process of solving problems with evidence collected through research can help teachers think critically, reflect on their work, connect theory with practice, take charge of their own learning, and take action to make change" (Falk & Blumenreich, 2005, p. 7). We devised an action research study in order to:

- · assess teachers' and students' understanding of action
- examine what aspects of planning, teaching and assessment policies and practices foster action
- identify key understandings and skills that lead to purposeful action
- determine the factors that contribute to student self-efficacy with regards to taking action
- develop a baseline school-wide definition for action as we moved forward as a learning community.

We viewed the study as a significant stepping stone to unpacking our hypothesis: The concept of action is more a state of mind than a product. Action can make a resonating difference to and in the world only when it is developed in tandem with a toolbox of explicitly taught skills, modelled behaviours, scaffolded plans and a gradual release of responsibility.

### STAGE 1: ASSESSING OUR PRIOR KNOWLEDGE

Applying research methodology from the text *Introduction to educational research* by Mertler and Charles (2006), the staff designed a qualitative method for data collection and analysis. We created a plan in which each of us took on a variety of roles as teachers, researchers, data analysts, curriculum and website designers, event organizers, and mentors as we journeyed through the various stages of the study. We collaborated closely and worked as a cohesive team through each phase of the project. Our research began by searching for peer-reviewed articles to add to our knowledge base and to build our literature review. However, we were confronted with a distinct lack of research that offered insight into our hypothesis in search engines such as ERIC (http://www.eric.ed.gov/) and JSTOR (http:// www.jstor.org/). This encouraged us to continue our research project and gather data on this subject.

This was a qualitative research study, which developed into a multi-

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staged project, utilizing surveys that were designed by the research team and completed by PYP students and teachers. For the student and teacher surveys, we identified keywords and phrases specific to our definition of action in the PYP and used this information to define the topics and dimensions to be included in the survey. As the school is small, the study was based on a relatively modest sample of 36 students and 7 teachers. We surveyed six randomly selected students from each grade level (kindergarten through grade 5). For the student survey, the research proposal was introduced to the parents through a letter of introduction, including a permission letter that we distributed at the beginning of the research process (see Appendix A). Our stated goal in the letter of introduction was to establish a baseline for students' understanding of action within the context of the PYP as well as to ascertain the relationship between this understanding and the definition of action in the PYP. Students completed a five-question survey, which simplified terms and facilitated completion of questions by English language learners and emergent readers (see Appendix B). A limitation of the survey was that the research focused on student action only within the context of the school and classroom and did not include the scope of home or external environmental factors that could contribute to student-generated action.

For the teacher survey, the research proposal was distributed with a letter of introduction (see Appendices C and D) at the beginning of the research process, with our stated goal the same as the student survey. The assumption was made for both surveys that students and teachers would answer the survey voluntarily and honestly; thus, we would be able to measure prevailing attitudes and feelings on action in the PYP.

From the aggregated data, it became clear that the majority of the student body did not have a clear understanding of action in the PYP. In fact, 80% of the students responded that action was some sort of body or sports-related movement. Of the students that showed a developed understanding of action in the PYP (using the keywords or phrases: changing the world, helping others, local to global, and/



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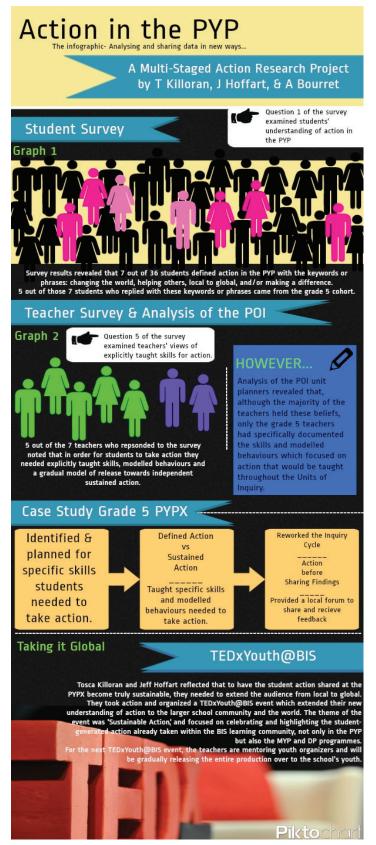


Figure 1: Action in the PYP: Analysing and sharing data in new ways

or making a difference), 71% were from grade 5, indicating that this particular cohort had a unique understanding of action in the PYP. This in turn begged the question, Why? What was happening in this classroom?

The collated data for the teacher survey indicated that five of the seven teachers believed that students needed explicitly taught skills, modelled behaviours and a gradual model of release towards independence in order to take action. The data raised an additional question: Were teachers' beliefs regarding action reflected in the documentation and planning of their teaching practice?

#### STAGE 2: EXAMINING OUR DOCUMENTATION

The second stage of the study consisted of an analysis of the school's Programme of Inquiry and the documentation of action in each grade level's unit planners. This analysis was based on the assumption that the information documented in the planners was an accurate representation of the teaching and learning that had occurred in the units of inquiry. We searched for patterns of instances of explicitly taught skills, modelled behaviours, or scaffolded experiences as documented on the planner, and increases in student action being recorded in box eight of the PYP planner.

Within the PYP planning documents, this school's teachers often use descriptors of an inquiry cycle based on Kath Murdoch's work (http://www.kathmurdoch.com.au/), in order to help envision the unit as an evolution of understanding. As we analysed the planners we found that most contained fully described activities for the stages of the inquiry cycle such as tuning in or finding out, but none of the grades, with the exception of grade 5, had explicitly planned for skills or modelled behaviour with the expressed intention of promoting student-generated action. We inferred that the planners seemed to suggest an overarching school philosophy that action would organically spring from the units of inquiry and did not need to be scaffolded throughout the learning cycle. Moreover, the final stage of the inquiry, "reflection and action", often included limited information or was left blank. In box eight of the unit planner, teachers also reflected that many of the actions taken by the students were often rudimentary and lacked the depth the teachers had envisioned as possible outcome of the units. The information documented on the planners did not match the results from our research regarding teacher beliefs on action; it became clear there was a gap between teachers' beliefs and practice regarding action in the PYP.

### **STAGE 3: EVALUATING OUR PRACTICE**

The third stage of the study involved going back to our question of why grade 5 had such a unique understanding of action. As a team we needed to examine why the students within that grade viewed action differently and how teaching and learning in their classroom shaped their views. A case study on grade 5 and their journey towards the culminating event of their primary years, the PYP Exhibition (PYPX), was conducted to better understand what planning, teaching and assessment policies and practices fostered action, and to identify key skills that led to purposeful and beneficial action.

#### Case study: The grade 5 PYPX

The reflective journal writings of Jeff Hoffart (the grade 5 teacher) revealed that he believed sustained student action required careful planning through each step of the journey towards the PYPX. He began with a seemingly simple plan: to create a classroom environment that supported the development of students' collaboration and conflict resolution skills. As students began to develop strategies and skills, he celebrated their growth by initiating a "student expert board", which allowed students to share their learning with each other. Setting the tone for collaboration and conflict resolution enabled students to develop the self-efficacy to take meaningful small actions on a daily basis in their own lives and the lives of their friends.

After an ethos of risk taking and problem solving had been established, the second initiative was to identify specific skills that students needed in order to take action. Hoffart identified and planned the teaching of investigation skills, including:

- developing higher-level Socratic questions through philosophy circles
- how to find quality research (using keywords, age-appropriate search engines)
- developing note-taking abilities (collecting, recording, organizing data)
- how to acknowledge sources (references, citations).

Students were asked to plan their action and develop time-manage-

JONATHAN S.	CHARGE FAIL		SILA
STEPHANIE	MILANO	STEPHANIE	LAURA
SIVE WRITING	APPLE KNOW-HOW	ORGANIZED	GRAMMAR
HOME VINCENT	JODATHAN M.	THIBAULT	LUKE
MONICA	THIBAULT	SAOURA	DANIEL
TRIBULET	VINCENT	VINCENT	THIBAULT
HELENE	S WYATT S	KANDE STEPHANIE	STEPHNIE
RESENTING OF SPACE	VOCABULARY	TYPING	PERIMETER + AREA
ONICA	DANIEL	MILAND	OLIVIA
LIVER	LAURA	VALERIA	DANIEL
HIVANI	LUKE	LUKE	OLIVER
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Figure 2: Student expert board

ment skills (using schedules), organizational skills (making lists, naming files), as well as planning and tracking skills (goals and action diaries). Additionally, students needed to choose an appropriate medium for their action product (for example, written, oral, visual components, ICT). In order to advocate effectively for their cause and share their findings, students had to develop verbal and non-verbal presentation skills. They also had to share, market and promote their action and develop publishing skills (for example, graphic layout, design of websites, blogs, wikis, brochures, pamphlets or books) in order to aid in that process.

Hoffart reflected that beyond all of these skills, it was clear that students needed to define action. The students were challenged to personalize action and view it not just as a mandate of their programme, but also as a lifelong mind-set. Jeff Hoffart's class began to explore the concept of sustainable action. Students grappled with the idea of having a bake sale and sending shoes or clothes to "poor kids". They were encouraged to think how these constituted one-off actions that were not ongoing or long-lasting. The grade 5 students began to reflect on their own community of learning and identify issues they wanted to address. Exclusion on the playground became one topic of interest and students designed collaborative, inclusive games that they taught to others on the playground. To help sustain their ideas, the students began to catalogue their actions on a website (http:// actionhub.weebly.com/index.html) they designed and created. Over time, this conferencing and reflecting on the concept of action resulted in a more solid understanding within the learners, and deeper issues with better solutions began to surface.

Jeff Hoffart viewed the PYPX as the vehicle for students to put their newly acquired knowledge and skills to use. In order to aid in this process, he made the decision to edit his planning documentation and modify Kath Murdoch's inquiry cycle by unrolling the "taking action" phase before the "sharing findings" phase. He found that changing the inquiry cycle and initialising action earlier meant that the focus for the exhibition shifted from students merely sharing their knowledge and understanding of a topic, to how that knowledge and understanding had provided the skills to enable them to take ongoing action.

#### Taking it further with TEDx

In the student issue of *IB World* (2012), students boldly challenged readers: "What's the point of learning, if we're not bettering the world?" (p. 14, 15). The research team reflected that part of our role was to take action as well by creating connections with organizations

that exemplified our definition of sustained action. Such affiliations could help support the global action initiatives created by our students. As a result, we organized a TEDxYouth event at our school to allow students the chance to communicate their ideas on a global platform. TED is a non-profit organization that began as a four-day conference in the United States over 20 years ago, and now, though multiple initiatives such as TEDx, it provides a professional platform for speakers to share ideas with others across the globe. As the website explains, "In the spirit of 'ideas worth spreading,' TEDx is a programme of local, self-organized events in which video and live speakers combine to spark deep discussion and connections in a small group" (http://www.ted.com/pages/about). Through the organization of TEDxYouth@ BIS students observed teachers taking action to support their students' initiatives and helped to reinforce action as a lifelong mind-set.



#### Figure 3: TEDxYouth event

As a result of the classroom environment, skills, modelling, organization and management of the PYPX, students were able to share their authentic action with the world confidently via the TEDxYouth event. MYP and DP students became inspired by the younger students and contributed by sharing the action they had taken for various Community and Service—as well as Creativity, Action, Service (CAS)—projects they had initiated. Feedback from teachers, parents, students and audience members were compiled and the results converted into a Wordle graphic. Wordle operates on algorithms that express the percentage that a particular word or phrase shows up in a given text as larger or more predominant. It is a word-cloud of data that provides insight into a theme in a piece of text. From that visualisation of data it was clear that the words "action", "sustainable", "change", "difference", "amazing" and "inspired" dominated the minds of those in the school's learning community.



Figure 4: Wordle graphic of TEDxYouth event feedback

#### **REFLECTION AND IMPACT**

By opening a dialogue about action at the school, we were able to identify areas of strength and areas for improvement. The research team found that the information recorded in the unit planners did not match the teachers' beliefs on what action could and should be at our school. Through the case study of grade 5, specific skills and learning journey in the PYP. This document moves students from teacher-guided action in the younger years to independent, skilful and sustained action in grade 5 or beyond. We also noted that a phase document alone would not provide teachers enough clarity to plan for action in the classroom. Consequently, we developed a website (http://www.helptakeaction.com/) to host and complement the phase document, offering resources, guides, posters, worksheets, lessons and activities in order to help teachers unpack the skills needed to take action within classrooms.

"We envision embedding the action phase document into the school culture and making sustained action a more inherent part of the curricula throughout grade levels, in order to shift the perspective of action from primarily an organic by-product of learning to more of an empowered state of mind."

modelled behaviours were identified to enable students to take sustained action. Upon reflection, the research team decided that these skills were too numerous to be developed with any depth over just one grade and teachers needed support in order to effectively use the PYP planners to encourage action within their classrooms. As a result, the team decided to create an action phase document that details how these skills could be developed throughout a student's The impacts of this study for the school were far-reaching and numerous. Students from many grade levels have come forward with independent, student-generated projects and ideas for action regarding the learner profile, social issues and community-based projects. As teachers observed their students' excitement from taking action, they too have been inspired to learn new skills, such as creating websites, e-books and apps that will assist them in actualizing ideas for making a difference in and to the world.

During the last staff meeting of the year, the administration and teaching staff identified action as an area of focus for the upcoming school year. We began the process by reflecting on the IB programme standards and practices (2010) relating to action, and celebrating our success to date. We envision embedding the action phase document into the school culture and making sustained action a more inherent part of the curricula throughout grade levels, in order to shift the perspective of action from primarily an organic by-product of learning to more of an empowered state of mind. We understand that this idea may make teachers uncomfortable by challenging what teachers may believe action is, and how it unfolds through our students' learning journey. However, this study was not merely based on conjecture but the analysis of data, which lead to changes within our own programme. Our research suggests that the students at our school were not organically producing action from learning and needed more scaffolding to reach that point.

Each stage of this action research contributed to our understanding. We developed a working definition for action specific to our school community and the PYP curriculum we are implementing: We defined action for our school as making a difference to and in the world.

**ABOUT THE AUTHORS** 

Tosca Killoran holds a master of education and IB Teacher Award Level 1. Originally from Canada she has spent 11 years teaching in international schools in Asia and Europe. She currently is the Early Learning Team Leader at Bonn International School.

Jeff Hoffart holds a bachelor of education from the University of Saskatchewan. Originally from Canada, he had four years of experience teaching in IB international schools prior to moving to Germany. Currently, he is a Grade 5 teacher at Bonn International School.

Adam Bourret works at Bonn International School as the PYP language coordinator and EAL teacher. Originally from the United States, Adam holds a master of education from George Mason University and a bachelor of arts, summa cum laude, in Anthropology from the University of Oregon. Action is a state of mind, rather than a product, that requires a set of explicitly taught skills, modelled behaviours, and scaffolded plans in order for it to be sustainable. In addition, we identified the tools to scaffold student execution of action and provided a platform for sustained action in the form of TEDx. In future, we could revisit our documentation to see how teachers have begun the process of explicitly teaching the skills for action. We could also re-evaluate the patterns between the skills taught and student action. One clear limitation of the study was that the survey sample size was very modest and further research could include whole-school data collection inclusive of the MYP and DP. By researching and collecting data on the whole school, we would further consolidate a cohesive definition, philosophy and curricula that support sustainable action.

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### **APPENDIX A**



April 28, 2012

Dear Parents,

We are currently conducting a multi staged action research project titled, 'Sustained Student Action in the PYP'. The purpose of the study is to:

- a) Establish a baseline for teachers' and students' understanding of action within the context of the PYP
- b) Ascertain the relationship between the understanding and application of action in the PYP.

The purpose of this letter is to ask for the participation of your child in the data collection process for this project. Your child will be asked to answer a short survey of five questions that will take less than 5 minutes.

Your child's responses will be anonymous. No individual information, such as names will be shared. The data collected will be aggregated and then used within the research paper to be considered for publication to the IB Journal of Teaching Practice inaugural edition 2013.

Your participation is voluntary. By **NOT** responding to this notification you are giving consent for your child to be participant in the study. If you do not wish to participate, simply send Ms. Tosca Killoran an email and she will ensure your child is not part of the study.

If you have any questions regarding the study please contact Tosca at <u>tosca.killoran@bonn-is.de</u>. You may also contact the Director of Bonn International School at <u>stephen.middlebrook@bonn-is.de</u> if any concerns arise during the course of the study.

Best Regards,

Tosca Killoran MEd Adam Bourret MEd Jeff Hoffart BEd



Bonn International School e.V. • Board Chair Martin Weller • Director Peter M. J. Murphy Martin-Luther-King-Str. 14 • 63175 Bonn • Germany • Phone +49 (0)228-30854 0 • Fax +49 (0)228-30854 351 admin@bonn-is.de • www.bonn-is.de • German Association Number 4862 Commerzbank Bonn • BLZ 380 400 07 • Account 386 44 44 • IBAN DE15 380400070386444400 • SWIFT-BIC COBA DE FF XXX

## **IB Journal of Teaching Practice**

### **APPENDIX B**

Grade: EAL: Y/N LS: Y/N F/M



#### Sustained Student Action in the PYP Action Research Project Student Survey

1. What is 'action' when we are talking about the Units of Inquiry?

2. How do you know if you have taken action?

3. Can you get better at taking action, why?

4. What helps you to take action?

5. Is it easier or harder to take action if you do it with a friend, why?

### APPENDIX C



April 28, 2012

Dear Primary Teacher,

We are currently conducting a multi staged action research project titled, 'Sustained Student Action in the PYP'. The purpose of the study is to:

- a) Establish a baseline for teachers' and students' understanding of action within the context of the PYP
- b) Ascertain the relationship between the understanding and application of action in the PYP.

The purpose of this letter is to ask for your participation in the data collection process for this project. Please print and complete the following survey as honestly and openly as you can. The questions are short and should only take 5-10 minutes.

Your responses will be anonymous. No individual information will be shared. The data collected will be aggregated and then used within the research paper.

In addition, during the next few weeks we will be coming around to interview a random sample of students for each grade level. These interviews will take only 2-3 minutes each and cause minimal disruptions to your classes.

Please return your unsigned, finished questionnaire to Tosca's cubby by May  $12^{\rm th}$  2012.

If you have any questions regarding the study please contact Tosca at tosca.killoran@bonn-is.de.

Best Regards,

Tosca Killoran MEd Adam Bourret MEd Jeff Hoffart BEd



Bonn International School e.V. • Board Chair Martin Weller • Director Peter M. J. Murphy Martin-Luther-King-Str. 14 • 53175 Bonn • Germany • Phone +49 (0)228-30854 0 • Fax +49 (0)228-30854 351 admingbonn-is.de • www.bonn-is.de • German Association Number 4982 Commerzbank Bonn • BLZ 380 400 07 • Account 386 44 44 • IBAN DE15 380400070386444400 • SWIFT-BIC COBA DE FF XXX

### APPENDIX D



Sustained Student Action in the PYP Action Research Project Teacher Survey

Please place your completed, unsigned questionnaire in Tosca's cubby by May 12th 2012.

- 1. How do you define student action as it applies to the PYP?
- 2. How do students grasp the concept of action as it applies in the context of the units of inquiry?
- 3. What are some ways student action is evidenced in the classroom?
- 4. How do students get better at taking action, and how do you measure that progress?
- 5. Do the skills for taking action need to be explicitly taught? If not, how do students acquire the skills to take action?