Thoughts on WIL

1.1 An umbrella term for WIL and similar approaches

Work-related learning WRL:
the idea of somehow including certain aspects of professional / vocational training and training on the job in the curriculum of tertiary (third level / third stage) academic education (university study programs) the focus and control of which still remain to a high degree at a university

In a fairly open and imprecise way to cover as many approaches and concepts of that kind as possible

More general and neutral than "work-oriented" or "work-integrated"

WRL is possible on bachelors', masters' and even PhD levels – the latter for example if someone does the research of his / her PhD thesis in a research laboratory of an organization.

1.2 WRL approaches in an international context

1. WACE ("advancing cooperative and work-integrated education")
housed on the campus of the University of Massachusetts Lowell, USA
members: University West, Drexel University in the USA, Simon Fraser
University in Canada, Tecnológico de Monterrey in Mexico, Victoria
University Melbourne in Australia, Hong Kong Polytechnic University etc.

Cooperative & Work-Integrated Education (CWIE)
"to acknowledge and embrace all forms of experiential learning utilized by
industry and educational institutions to prepare the next generation of
global professionals. CWIE is an encompassing term that includes:
cooperative education, internships, semester in industry, international co-op
exchanges, study abroad, research, clinical rotations, service learning and
community service" (waceinc.org).

1.2 WRL approaches in an international context

2. Royal Melbourne Institute of Technology (RMIT University)

Principle 1 of the WIL policy:

"The key feature of a WIL experience in RMIT programs is <u>assessed professional or vocational work in a work context in which feedback from clients and others from industry and community is integral to the experience.</u>

This WIL experience includes the following key elements:
• students assessed on a structured activity which allows them to learn and demonstrate their professional or vocational practice
• students interact with industry and community (including clients)
• the activity is completed in a work context (can include teamwork)
• these interactions and context provides feedback useful for learning
Any or all of these may be simulated – including interaction with clients" (rmit.edu.au/dsc/wil/policyguidelines).

1.2 WRL approaches in an international context

3. Queensland University of Technology Brisbane (QUT), Australia
"Manual of Policies and Procedures"
"**Work integrated learning** occurs in the curriculum where <u>students learn through engagement with industry and community partners in authentic activities that are planned for and assessed</u>. These activities provide opportunities for students to:
• develop and integrate their knowledge, skills and dispositions through creative problem solving in real world contexts;
• experience the practices and cultures of relevant professions and sectors;
• explore career options and represent their emergent professional identity and capabilities; and
• reflect on practice.
WIL does not necessarily entail learning in workplaces external to QUT. It can occur on-campus or through virtual environments; it may also involve students engaging in work integrated learning activities overseas.

1.2 WRL approaches in an international context

3. Queensland University of Technology Brisbane (QUT), Australia "Manual of Policies and Procedures"

A **Work Integrated Learning unit** is a unit where students engage in work integrated learning activities. Work integrated learning activities occur in many forms including:
• professional work placements (including virtual placements)
• internships, practicum, field/clinical placements
• cooperative education
• service learning
• community projects
• industry projects
• work-based projects
• fieldwork
• site visits, field observations and shadowing" (mopp.qut.edu.au/C/).

1.2 WRL approaches in an international context

4.
The National Association of Graduate Career Advisory Services (NAGCAS) in Australia introduces the term career development learning (CDL) besides WIL (nagcas.org.au).

1.2 WRL approaches in an international context

5.

The Universities of Applied Sciences in Germany, Austria, Switzerland and Liechtenstein use the label anwendungsorientiert meaning "application oriented" (application in the sense of an "applied" science) or Praxisorientierung resp. Praxisbezug meaning orientation towards or relation to practice and work in organizations (in the sense of best practices, of course).

Analogous properties apply for
polytechnic universities in anglophone countries and
IUPs (Instituts Universitaires Professionnalisés) in francophone countries.

1.3 WRL methods

New term: work-oriented training WOT

	Domain-specific knowledge	Domain-independent knowledge
On-campus training without any external organization (WOT)		
On-campus training in cooperation with external organizations (WIL on-campus)		
Training in external organizations (WIL in organizations)		

Typ av inslag	AIL-motivering
Sällsynta, osannolika, realitetsbaserade scenarier, Scenarier kring vad som kan hända om ngt osannolikt trots allt händer	Viktigt, t ex i säkerhetsområdet. I dessa scenarier lär man sig hur verksamheten ska kunna organiseras så att medarbetarna lär sig hur de ska agera i dessa sällsynta situationer.
Rollspel, företagsspel, planspel, simulering	Syftet är primärt att se hur olika faktorer samverkar, men indirekt visar rollspelet också hur verksamheten kan lära sig och förändra sitt beteende.
Projektarbete med projektmanagement	Om projektarbetet är i en verksamhet lär sig de studerande om arbetet i arbetet. I reflektionen efteråt kan man ta upp verksamhetens lärande.
Workshop i en organisation	En verksamhet som ställer upp på detta gör det för att lära sig något. Om detta återförs till de studerande blir det AIL
Gästföreläsare från yrkeslivet	som berättar hur man gör i arbetslivet och som konfronteras med de akademiska teorierna. I denna konfrontation finns stora inslag av AIL, fast då hos arbetslivet
Forskning inom AIL-relaterad forskning	Forskare och forskningsresultat inom AIL bjuds in och tas upp i undervisningen.
Verksamhetsförlagd undervisning (Arbetslivnära akademisering)	Innebär att läraren går ut till verksamheten och konfronterar den med de akademiska förhållningssätten. Detta är kompetensutveckling i arbetslivet och således AIL
Verksamhetsförlagd utbildning (VFU)	Här lär sig de studerande om arbete i arbetet.
Fältstudier	De studerande lär sig främst om arbetet, men i fältarbetet finns även inslag av lärande i arbetet.
CooP	Precis som vid VFU: Lärande om arbetet i arbetet.

2. Differences between pure academic and WRL university programs
2.1 Requirements towards graduates
2.1.1 Common requirements towards academic and WRL graduates

Good fundamental knowledge
Knowledge of necessary foreign languages
A lot of knowledge with long half-life periods
Intellectual flexibility
Capability of auto-didactic learning
Capability of life-long learning
Capability of analogical thinking, of knowledge transfer
Capability of working in teams (at least a little)
Capability of good oral and written presentation
etc.

Although some of these qualities are claimed as specific for WRL,
there is nothing new!!!

2.1.2 Special requirements towards graduates in WRL university programs

Knowledge necessary to immediately start to work in an organization
Good capability of working in teams
Knowledge of work environments in organizations
Basic acquaintance with the work in organizations

Knowledge of structures and functions of organizations
Overview of important organizations in the study field
Knowledge of special requirements of individual organizations
Knowledge about the qualities of organizations
Basic capability to judge the qualities of organizations
etc.

Here we see some new qualities
many of which can be trained on campus in the framework of WOT,
and we see that external organizations are to be involved in WRL programs
at least up to a certain degree.

We talk about work RL, work OT, work IL, but:

work = work

professional life = professional life

company, organization = company, organization

practice = practice

?

Are all of the different types equal?

No!

work ≠ work

professional life ≠ professional life

company, organization ≠ company, organization

practice ≠ practice

2.2 Differences between organizations

Do we as a university have to cooperate with all of the different types
in the field of WRL
?

No!

Are all of the different types relevant for WRL, WOT, WIL
?

Yes!

What shall all that mean?

WRL is necessary, but be cautious and careful!

2.2 Differences between organizations

About German public projects going wrong:
Mertens, Peter: Schwierigkeiten mit IT-Projekten in der öffentlichen
Verwaltung. Informatik-Spektrum 35(2012) 433-446

Toll Collect (motorways)	2 years late
Health insurance card	permanent changes and delays
Administration of unemployed people data	hopeless
ELENA payroll data transfer	cancelled (data privacy)
eBalance: XBRL-based company profit transfer	3 years late
Assignment of study places	at least 3 years late
Berlin airport	at least 3 years late

2.2 Differences between organizations

Are those the companies a university has to cooperate with
in the framework of WRL?
No!

There is a big opposition between universities and 'bad' organizations.
These types of organizations have to learn from universities and not the
other way round!

There is only a negligible opposition
between universities and 'good' organizations.
Universities can learn best practices from 'good' organizations!

Universities need the necessary self-awareness and reputation to
distinguish between 'good' and 'bad' organizations!

2.2 Differences between organizations

CAUTION: a very critical remark

It is often stated that the requirements towards graduates
regarding work life in organizations
have changed a lot during the past decades.
In fact, they have not.

'Good' organizations always appreciated the above mentioned qualities of
graduates (2.1.1 and 2.1.2), and only 'bad' ones did not.
(I would even assert that an organization
which does not appreciate these qualities is 'bad'.)

The above list with WRL requirements (2.1.2) always existed,
but it was neglected by many traditional universities.

CAUTION: a very critical remark, continued

Obviously, the economic pressure of organizations –
being too avaricious to invest money in organization-internal training –
on politics and
the political pressure on universities
to introduce WRL aspects in their study programs
have become stronger.

Probably this fact is interpreted as a change of professional life.

This situation entails the danger
that 'bad' organizations also try to exert an influence on universities,
in the sense that they claim that bad practices in organizations are still
better than the theories taught at universities.

<u>CAUTION: a very critical remark, continued</u>

And now some of the universities reacting on the political pressure
tend to the other extreme
behave as servants of industry and business and
make a science of introducing WRL aspects into their study programs.

<p style="text-align:center;color:red;">We should not go this way at hv,
we should not obey political pressure,
we should not make a mountain out of a mole hill,
(no large theoretical reflections,
no social philosophy, no theology, no dogmatic)
but stay on the ground and
look for effective, efficient and practicable WRL aspects.</p>

2.3 Vision 2022 of University West: WRL and 'bad' organizations

(0) Högskolan Västs forskning och utbildning skapar, vidareutvecklar och sprider samhällsrelevant vetenskaplig kunskap, förmåga och förståelse.

(1) Via utbildningen ges studenterna bästa möjliga förutsättningar
att utvecklas som goda samhällsmedborgare – kritiska, kunniga,
demokratiska, solidariska, toleranta, aktiva och självständiga individer.
Högskolan Väst är en erkänt drivande aktör
för humanism, demokrati och mångfald
genom kunskapsbyggande, medborgerlig bildning och livslångt lärande.

(2) Högskolan Väst fokuserar genom profilen Arbetsintegrerat lärande,
AIL, kunskapsspridning och kunskapsgenerering lokalt och globalt i
samverkan med omgivande samhälle. Nationellt är högskolan den ledande
noden och internationellt en nyckelaktör inom Arbetsintegrerat lärande.

2.3 Vision 2022 of University West: WRL and 'bad' organizations

In the case of bad organizations,
there is a contradiction between (1) and (2)!

(1) should dominate (2)

University West should lay stress on critical and independent individuals
even if some bad organizations do not like these qualities.

2.3 Vision 2022 of University West: WRL and 'bad' organizations

Universities can avoid cooperating with 'bad' organizations.
Our students, however, cannot!!!

We should teach our students
the differences between 'good' and 'bad' organizations.

We should convince our students that
training at a university is not far from the work in 'good' organizations,
but that 'bad' organizations are far from an acceptable professional life.

How can we at a university prepare our students
that they behave independently even in 'bad' organizations and
that they help to turn them into learning 'good' organizations?
This is the first difficult question worth looking for adequate methods.

2.4 Requirements towards the quality of organizations
2.4.1 Epistemological issue: knowl. about knowledge within organizations

relation towards / treatment of employees? (human res. philosophy)
relation between technologists and business people?
independently thinking, life-long learning employees wanted (cf. 2.1)
learning organization? (organization theory)
best practices vs profit maximization?
quality management (ISO 9000)? quality of products?
business processes?
IT compliance and IT governance?
business excellence?
sustainable business plan?
acceptance of consultants?
etc.

How can we measure the quality of an organization, that is, (a) the quality of knowledge within an organization? This is the second difficult question.

2.4.2 Epistemological issue: knowl. about knowledge from organizations

Example: different results of drug research
when research groups are sponsored by pharmaceutical companies or not

References:
Spektrum der Wissenschaft (Scientific American, German edition)
*** June 2013, p. 33
dida.library.ucsf.edu
scientificamerican.com/dec2012/drug-research

Other examples: NSA, rating agencies, banks, military research

How can we measure the quality of an organization, that is,
(b) the quality of knowledge produced by an organization?
(Reflects the quality of the entire organization.)
This is the third difficult question.

Wes Brot ich ess, des Lied ich sing

Inwieweit werden Wissenschaftler in ihrem fachlichen Urteil von finanziellen Beziehungen beeinflusst? Um dies herauszufinden, befassten sich Forscher der Mayo-Clinic in Rochester, US-Bundesstaat Minnesota, mit dem Diabetesmittel Rosiglitazon. Dessen Einnahme führt laut einer Metaanalyse zu einem erhöhten Herzinfarktrisiko. Die Forscher untersuchten Fachartikel, in denen diese Metaanalyse zitiert wurde. Dabei stellten sie fest, dass Autoren, die einem Interessenkonflikt unterlagen, das Medikament überdurchschnittlich oft positiv beurteilten. »Welchen Standpunkt die Autoren in der Rosiglitazon-Debatte einnahmen, hing deutlich davon ab, welche finanziellen Beziehungen sie zu Pharmaunternehmen unterhielten«, steht in der Studie von 2010.
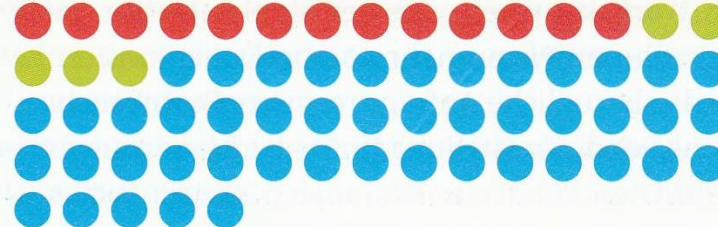
31 Autoren vertraten die Ansicht, Rosiglitazon erhöhe das Infarktrisiko nicht.
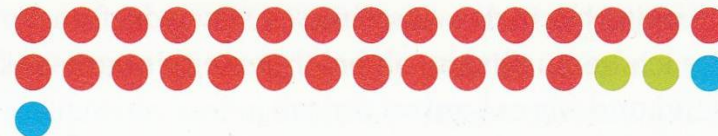
84 Autoren fällten kein klares Urteil.
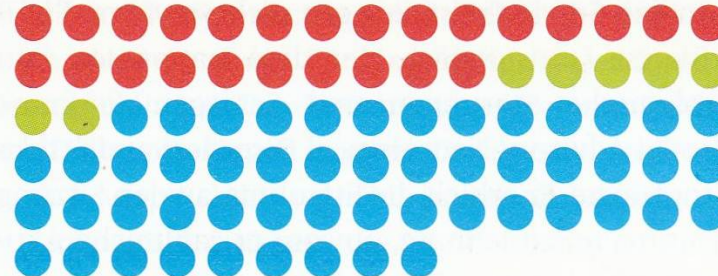
65 Autoren kamen zu dem Schluss, Rosiglitazon erhöhe das Infarktrisiko.

● Autoren mit finanzieller Beziehung zu Rosiglitazonherstellern
● Autoren mit finanzieller Beziehung zu sonstigen Pharmaunternehmen
● Autoren ohne finanziellen Interessenkonflikt

GRAFIK: JEN CHRISTIANSEN, NACH: WANG, A.T. ET AL.: ASSOCIATION BETWEEN INDUSTRY AFFILIATION AND POSITION ON CARDIOVASCULAR RISK WITH ROSIGLITAZONE: CROSS SECTIONAL SYSTEMATIC REVIEW. IN: BMJ 340, S. C1344, 2010

3 Summary of the discussion so far

Many requirements towards graduates which are often claimed by WIL
- are standard requirements, nothing new
- are already covered by WOT

What remains for WIL in general?

<u>Planned and assessed professional or vocational activities in an authentic work context in which industry and community partners and their clients give individual feedback to the students</u> (from RMIT and QUT)

I would add: … selected industry and community partners …
as many WRL requirements towards graduates
cannot be supported by any arbitrary company.
But this is not a standard!!!

3 Summary of the discussion so far

What remains for a hv-specific WIL profile?

Fairly little, but two important aspects which I did not find anywhere else:

1 Cooperate only with organizations which are selected in a strict quality assessment process on the basis of best practices
(The missing selection regarding internships during study programs at German Universities of Applied Sciences causes big problems!!!)

2 Prepare the students to cope with and change bad practices in organizations
(e.g. an excursion to a 'bad' organization or a guest lecture of a representative of a 'bad' organization and afterwards an intensive discussion with the students about quality and best practices)

3 Summary of the discussion so far

What remains for a hv-specific WIL profile?

Furthermore:

1 Professors who work as entrepreneurs and consultants

2 Employees from organizations who work as guest lecturers and contract teachers at the university

Be careful, do not run the risk of overreacting on political pressure and of making a mountain out of a mole hill regarding hv-specific WIL!