Young People, the Internet and Inequality: what are the causes and consequences of exclusion?

Dr. Albin Wallace

Director of I.T. and School Development

The Education Fellowship

albinwallace@educationfellowship.net

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Abstract

Part of the provision within educational institutions is the design, commissioning and implementation of ICT facilities to improve teaching and learning. Inevitably, these facilities focus largely on Internet Protocol (IP) based provisions including access to the World Wide Web, email, interactive software and hardware tools. Educators should be committed to the use of ICT to improve learning and teaching as well as to issues relating to the Internet and educational disadvantage, especially with respect to access and exclusion concerns. In this paper I examine some recent research into the issue of inequality and use of the Internet during which I discuss the causes and consequences of exclusion in the context of social inequality, digital literacy and digital inequality, also touching on issues of global inequality.

INTRODUCTION

At a superficial level, the Internet can be seen as a global, ubiquitous phenomenon that potentially cuts across traditional socio-economic barriers. But there are philosophical, sociological and practical concerns that complicate this, especially in the context of education. The Internet is certainly an important element of education and has been embraced by English universities, colleges and educationalists as a tool for learning. Part of the attraction of the Internet stems from its apparent ease of access to information. It is also a reflection and potential enabler of life-long learning, which can be seen as a feature of contemporary life. Usher and Edwards see that "The key to the pursuit of the new, middle-class and their post-modern sensibilities is the adoption of a learning mode towards life" (Usher and Edwards, 1994, p. 190). However, this statement contains some interesting provisos, not the least of which is the assumption that being middle-class is a precondition (or indeed a consequence) of learning. I will argue later how this is of particular relevance to Internet use in education. The fact that education is increasingly seen as a life-long process not restricted by the temporal or spatial constraints of the classroom is partially due to the online educational opportunities that are apparently offered by the Internet and the World Wide Web in particular. Certainly it should not be disputed that the Internet potentially provides access to unprecedented amounts of information. But information is not the same as learning. In fact, some writers have sounded notes of caution about the proliferation of information. Nearly 30 years ago Baudrillard warned that "We live in a world where there is more and more information and less and less meaning" (Baudrillard, 1981, p. 79). Since the popular advent of the Internet this is even more apparent. The increasing ability to access information raises several issues, not least the need to synthesize, analyse and critically evaluate content even before putting it to practical use. This means potentially increased power to the Internet user who possesses these skills. Lyotard can be seen as having predicted this in 1979 when he wrote that "The computerization of the most highly developed societies allows us to spotlight certain aspects of the transformation of knowledge and its effects on public power and civil institutions" (Lyotard, 1979, p. 7). Certainly, knowledge is increasingly seen as residing more in the public domain. But on the Internet it is less organised and more chaotic. To further illustrate its role in a post-modern society Butler describes how "The internet is at present a typically postmodernist phenomenon - it is (currently) a non-hierachized, indeed disorganised collage" (Butler, 2002, p. 117). Sellinger also sees that "The internet is a

postmodern phenomenon…Unlike school, it has no history" (Sellinger, 2004, p. 149). Information itself is insufficient to create knowledge. This may be why educated use of the Internet through critical, analytical and creative skills assist to access, synthesize and effectively use much of the content of the Internet. To be included as an effective, learning user requires certain skills that are necessary to avoid exclusion in the world of the Internet and research. However, before discussing what exclusion is, it is worthwhile looking at what inclusion implies with respect to the Internet. Carver et al helpfully state that "a key criterion of inclusion is the ability to store information, experience and resources with key groups" (Carver et al, 1999, p. 2). The purpose for which this information, experience and resources can be used can also be put in a sociological context. Some writers see the Internet as presenting a challenge to values, in a similar way as television and other mass communications media may have been perceived previously. As Horrocks says, "The post-modern crisis is occurring not because technology threatens the values of humanism, but rather because technology has revealed the outcome to which these values must inevitably lead" (Horrocks, 1999, p. 30). There are also those who valorise the Internet as a tool of emancipation, sometimes too uncritically. "Technology reveals more specifically its strategic function in the context of educational practices ostensibly geared towards freedom, emancipation, liberation, as places where human beings can exercise freedom or, also, where they can develop into free and responsible adults and individuals" (Masschelein and Quaghebeur, 2005, p. 52). Somewhat utopian visions such as this run the risk of overlooking issues of ICT and inclusion, where I see it having potentially a darker side when viewed in the context of social inequality and exclusion.

SOCIAL INEQUALITY AND EXCLUSION

Having looked at Carver's key criterion of inclusion, I will now turn to how exclusion can be defined and viewed. Oppenheim describes social exclusion in terms of isolation and alienation from economic, social, political and cultural life including increasing isolation from even informal networks of supports (Oppenheim, 1998). In terms of the Internet, there is a resonance especially with respect to online support networks. Walker and Park describe social exclusion in terms of the length of time that individuals and groups spend in poverty (Walker and Parks, 1998). The problem, however, with the phrase "social exclusion" is that it can applied to any situation if the word 'social' is omitted. My use of the term with respect to the use of the Internet is mindful of the multi-dimensional nature of deprivation (both physical and other, as discussed later). Hann also believes that there should be a close examination of the excluded groups themselves and their rights (Haan, 2001). At a fundamental level we can define exclusion as referring to a number of things: basic physical needs, employment, social contact, information, ability for self-improvement, education and recreation. The latter of these can certainly be seen as being related to exclusion issues the Internet. However, to view the issue in perspective, exclusion in terms of the Internet is not as potentially disastrous in terms of social and economic impact as exclusion from other technological tools. Compaigne commented that "Having access to an automobile and to have a license to operate one was certainly more critical to one's livelihood in the second half of the twentieth century as having access to email may be today" (Compaigne, 2001, p. 23). We need to contextualise the importance of the Internet and access to it whilst at the same time recognising that in the longer term there may be damaging effects as a result of exclusion from the forms of intellectual and social capital that access to the Internet facilitates, and the demands that education and the workplace place on individuals' ability to access resources. Zetterman and Lindblad warn that "unemployment, immigration and the

risk of social exclusion in a more marketboriented society may produce a new, educational underclass" (Zetterman and Lindblad, 2001, p. 3). Social alienation too can be seen as a possible social consequence of digital exclusion. Disability is also a potential source of inequality in this area. The social and personalised elements of Internet use are relevant here especially when "Current understanding of disability and special needs are constructed on the basis of a dualism between individual and social factors" (Terzi, 2005, p. 457). There has been some significant attempt by government to address issues of disadvantage in Internet use. There are website standards, and the English 1995 Disability Discrimination Act and Special Educational Needs Discrimination Act are laws that can influence web design. The Web Accessibility Initiative Standard (WAIS) and the accessibility function of Microsoft Windows © also can assist in reducing exclusion due to disability. The concerns here are not only the technical issues to be overcome but implied values in the provision of adaptive technology. Some authors use "normality" as the benchmark when discussing disability. MacKay, especially says that "Disability can disappear positively only when it is accepted completely as part of normality" (MacKay, 2002, p.162). It is implied, however, that "normality" is axiomatic. This could disempower those who are placed, or who place themselves outside the parameters of normality. It has been argued that "The contribution of [England's] New Labour's inclusive educational policy has been to forward a process of assimilation based upon an uncritical view of 'normality', itself structured by the values of performativity that legitimate state regulations and control" (Armstrong, 2005, p. 149). Especially with respect to Internet use in education there is a bias towards the middle-class as the embodiment of normality. As in the earlier discussion of lifelong learning and the Internet, education is placed in a middle-class context where there is a strengthening of traditional social power bases. In this way, use of the Internet in an educational context can be seen as not just middle-class but also subject to quite marked cultural bias, especially when one considers the global perspective.

GLOBAL INEQUALITY

There is still evidence of digital exclusion in the USA, despite the dominating influence of American culture and language evident in the Internet. As well as this American bias, it can be seen that technologically developed countries such as the USA have a technological advantage. The language of the Internet is largely English-based and the USA has the highest absolute number and percentage of people online (Booz-Allen and Hamilton, 2000, p. 8).Yet digital exclusion exists here, too. "Internet non-users were more likely to be female, older, have lower income, have less education, be slightly disproportionately African-American, have no children, work full-time, send no emails and belong to fewer community organisations" (Rice and Katz, 2003, p. 607). Non-English speakers miss out on much of the information that is available on the Internet (Runnel and Vengerfeldt, 2002). Where there has been a localisation of the Internet, this has not always been in a free and liberalised way, for example in the recent launch of the Chinese version of the search engine Google © in a heavily censored form reflecting political and ethical power structures of China that could be seen as contrary to Western liberalism. Steyaert compares the tension between access to ICT and development support of the third world. He believes "[the] tension between policy on physical access or information literacy can be compared to development support for the third world" (Steyaert, 2002, p. 211). Dasgupta et al see no global inequality in terms of provision but make no comments on skills. They state that "we have investigated the determinants of the 'digital divide' between high and low-income countries. Surprisingly, we find there is no gap in Internet intensity" (Dasgupta, S. et al, 2000). Both these statements

are so broad and value-laden that I am cautious about reading too much into either one. On a pragmatic level, Tyler argues that "the Internet potentially gives people in remote areas access to otherwise unobtainable resources and to easier communication with others in their community, thus reducing inequality" (Tyler, 2002, p.201). This may be so, but the existences of infrastructure and skill development are not prerequisites that can be so easily assumed. Some authors have, in my opinion quite rightly, made much of the westernised bias of the Internet, not just in terms of content, but in terms of language and ideas. In a somewhat idealised way, certain authors have made claims such as "the discourse of liberation theology aims to replace Eurocentric conceptions of both modernity and postmodernism with an indigenous, historical and cultural consciousness" (Appignanesi and Garnett, 1999, p. 163). But with the Internet, there is a sense, as discussed above, of the inevitability of its continued Americanisation. In this way the Internet culturally may not superficially differ from television, although the regionalisation of television stations is in contrast with the numinous, global presence of the Internet whose websites simultaneously exist everywhere and nowhere. Blake and Standish disagree with Dasgupta et al and argue in the context of the Internet that "in Africa and the rest of the developing world, patterns of inclusion and exclusion, empowerment and disempowerment have differed from those of Europe and North America" (Blake and Standish, 2000, p. 47). The arguments from both sides seem to be largely conjectural. With respect to the Internet on the global stage, there is also conflicting opinion as to racial inequality within countries. Early American research indicated racial inequalities in Internet use (Hoffman and Novak, 1998). They said that income explains computer ownership, education does not explain racial differences and income does not explain race differences. "White students are significantly more likely than African-American students to have used the web at home. Students with no home computer, regardless of race, have never used the web at home" (Hoffmann and Novak, 1998, p. 6). More recent British research shows this is not currently the case in Britain (Livingstone and Bober, 2005b).

DIGITAL LITERACY

The ability to use digital technologies as well as conventional literacies is of increasing importance and relevance with respect to educational and social issues. "An argument could be made that the national curriculum holds little relevance for the complexities of life in the twenty-first century regardless of which class you belong to" (Reay, 2001, p. 343). Increasingly digital literacy is becoming more important as are the attendant innovations in terms of content and the mode of delivery as well as the accompanying skill development. Just as with other skill areas such as conventional literacy and numeracy there are different levels of use by different individuals and groups based partially on their skill and capability. Steyaert notes that "not everybody has the same efficiency and effectiveness in operating technology" (Steyaert, 2002, p. 208). In the use of the Internet there is not just the technical or operational skill to be considered but critical analysis and problem-solving skills necessary to make sense out of the content of the Internet and the search engines that are the primary tools for interrogation. Steyaert also notes that "not all citizens have the same level of information literacy: the ability and attitude to search for relevant information, translate that to one's own situation and implement the necessary actions" (Steyaert, 2002, p. 208). Those with greater levels of skill in problem solving and metacognition will be further advantaged in terms of information retrieval. However, the Internet is also about communication as well as information. Literacy has a role here too "Websites create social networks that are related to and quite different from those produced through the circulation

of bodies and texts in schools" (Leander and McKim, 2003, p.237) and this is increasingly evident in the "Web 2" which is largely characterised by weblogs, personalised web pages and other mechanisms for collaboration and sharing. With respect to the Internet and education, those who achieve may be enabled to achieve higher. The disaffected and disenfranchised are at risk of achieving less. As Weiner says, "web-based technologies and the pressure to engage with them, can be seen as part of a wider set of social and cultural practices, goals and power relations" (Weiner, 2004, p. 11). This raises the issue of further potential digital literacies that I have proposed later in this essay. The pressures that are brought about in the way Weiner describes come from a view of the Internet as being an enricher not just of education but of social power. Engagement can certainly be seen at different levels. Livingstone and Bober in their recent far-reaching British-based research conclude that "for some the Internet is an increasingly rich, diverse, engaging and stimulating resource of growing importance in their lives; for others it remains at present a narrow, unengaging if occasionally useful resource of rather less significance" (Livingstone and Bober, 2004a, p.414.) The role of the school is seen as crucial in addressing issues of equality or equity of access raised in this way. This of course is true in other areas. The same point could be made (and probably has been) about the use of television in the latter half of the twentieth century. The issue as to where the Internet is accessed is also important. Livingstone and Bober go on to make the point that "while access at home and elsewhere is rapidly increasing, there remains one quarter of the youth population that has access at school but not at home. This figure has not reduced significantly in recent years, making provision through school an important opportunity for redressing inequalities" (Livingstone and Bober, 2004b, p. 9). I will return to this point later. Concepts of digital literacy always relate back to educational issues. To assist in addressing access issues in ULT academies I have presumptuously extended my definition of literacy to include a number of concepts. With respect to the Internet this could include the following:

- Basic operating literacy at the hardware level (how to connect to broadband and log in) and the operating systems level (how to use Windows © or Mac OS ©).
- Communications literacy (ability to read and write for both synchronous and asynchronous communication).
- Cultural literacy (understanding that there is a different cultural context for America, British, Australian etc. websites).
- Critical literacy (ability to evaluate information, challenge opinion, treat appropriately websites where information is apocryphal, spurious or just plain wrong).
- Analytical and synthetic literacy (ability to take ideas and extrapolate or incorporate into one's own thinking).
- Research literacy (understand search engines, key words, metadata, complex search strings, narrowing of search criteria).
- Moral or ethical literacy (make value judgements on websites; deal with accidentally accessed inappropriate material).

The above takes for granted certain characteristics of Internet users that include the social and educational factors that may facilitate the above (Foley, 2000).

DIGITAL INEQUALITY

To return to the nature of inequality it is worth noting that which is helpful and that which is less helpful. The commonly used phrase "digital divide" is misleading. When speaking of digital inequality I would argue that it does not exist in this form. Rather than there being a digital divide, there is more accurately a continuum of equality of access (in all senses). The 'digital divide' is an artificial binary, implying there are two groups. The assumption is that having access is better than not, and that the internet is such an essential part of life that no-one should be excluded. This could also imply that everyone has a right to access. Ironically, it has been suggested that "This can lead to a situation where, for example, the state of homelessness remains unquestioned as long as the individual has guaranteed access to public Internet stations" (Langer, 2004, p. 4). In an extreme form this can lead to the assumption that the right to information gets higher priority than the right not to starve. Although, as discussed earlier, the long-term ramification of lack of access could be serious, it can clearly be seen that access to the Internet is not of the same immediate importance as access to food and shelter. The term 'digital divide' implies an obvious poverty that is misleading. Access is not just about provision of tangible equipment; it is about access to intellectual as well as technical skills and capabilities. As Hargittai says, "there is great discrepancy between what is physically available on the Web and what information is realistically accessible to others" (Hargittai, 2003, p. 17). This discrepancy is influenced by cultural, social and educational as well as economic factors. Helpfully, Hargittai says that the conversation should continue, as "a more comprehensive understanding of digital inequality is necessary if we are to avoid increasing inequalities among different segments of the population due to disparities in effective access to all that the Internet has to offer" (Hargittai, 2003, p. 20). I agree and believe that digital equality is about more than just providing equipment. It is also about the development of autonomy, skills, support and scope of use amongst people already online as well as those currently excluded from physical access. Use of the Internet does not automatically imply powerful educational use. Hargittai wryly observes that "The Internet prophets who foresaw that the web would empower citizens, increase social capital and enhance equality of opportunity probably did not have gambling or pornography sites in mind when they made these predictions" (Dimaggio and Hargittai, 2001, p. 11). Ironically, in this way increased Internet usage can financially and morally disadvantage as well as facilitate. Also, far from levelling the playing field, the Internet can create hierarchies where "electronic systems simultaneously reflect and transform existing topographies of class, gender and ethnicity, creating and recreating hierarchies of places mirrored in the partial architecture of computer networks" (Warf, 2001, p.16). The flow of power may also be differently enabled by the Internet where new power structures emerge. Heng argues that "while the Internet serves as an interesting example of unintended consequences of social action, it also supports the postmodernist position that power does not flow from a single power centre to all peripheral points; rather it flows from the peripheries in capillary forms" (Heng, 1998, p. 6). This may not necessarily be a democratising force. There are also factors outside the Internet that may affect exclusion. As with other forms of exclusion, exclusion from the Internet can be the result of financial impoverishment. Livingstone and Bober see that "the clear association between socio-economic status and indication of access and use suggests that the social and economic sources of exclusion require concerted attention if the benefits of the Internet are to be fairly spread" (Livingstone and Bober, 2005, p. 13).

CAUSES OF EXCLUSION

I will now turn to discussions on the causes of exclusion. Jahnukainen has seen that "living in a world of computers and Internet, one might be accused of being socially excluded for not having an email address." (Jahnukainen, p.1) The symbolic nature of this observation is important, when an email address is considered as a status symbol, or emblem of belonging. From being the earlier exclusive domain of the professional, email is now an embedded part of many people's social identity and the email address itself sends signals about who one is. Livingstone and Bober (2005b) have many interesting things to say about exclusion. Their recent research shows that in the UK most children and young people have access to the Internet but the oldest and the youngest have lowest levels of access. They show that non-daily users take up fewer online opportunities and that there are few gender differences but given access, boys are more likely to use Internet and to use it for longer. Boys also take more online risks. Daily users of the Internet use it more for social networking and middle-class children are more likely to use the Internet due to greater skill levels and more self-efficacy. Although access and use is different in different geographical areas there is no noticeable difference in ethnic use. Disability is associated with lower levels of access, but not use where ICT is available. Certain groups in the UK, who although once were users are now excluded from the Internet, are voluntary middle-class drop-outs (self-exclusion) and involuntary dropouts who are excluded due to lack of access. Livingstone and Bober see that age, gender and socio-economic status all influence quality of access and use. They also agree that the "digital divide" label is an unhelpful binary as there is a continuum from narrow, unskilled use to diverse, skilled use. Specifically with respect to children, parents with high Internet self-efficacy are more likely to have children who are good users. This is not to imply that the digitally excluded are a static group. There are changing conditions of digital exclusion although inequalities are likely to grow along with a variation in quality of use. Access issues are complex and it is worth noting that the Internet is easier for the middle-class to use as there is more choice for location with greater incentive to use it confidentially and in a private rather than public place. Again Livingstone and Bober see that technical and intellectual skills and subtle complexities sit at the heart of the matter many of which lie outside of the control of the user. An example of this is where "a significant minority of young people lack access to the Internet altogether because their families are unable or unwilling to provide it "(Livingstone, 2003, p. 155). But it is not simply a case of addressing this by the provision of public funds. Livingstone elsewhere argues that "providing domestic access to ICT may actually increase rather than decrease inequalities in class, gender and ethnicity precisely because of inequalities in the nature of ICT use" (Livingstone, 2003, p. 154). Those already empowered may be even further empowered by increased domestic access and the continuum of inequality of use could be further stretched. The previously discussed potential enslavement by online gambling, pornography etc. must also be borne in mind. This is not to denigrate the different motivations for using the Internet, although "some of the digital divide (sic) may be due to differences in interests and priorities among individuals in the same ethnic and socioeconomic group" (Rice and Katz, 2003, p. 600). Education and the pursuit of knowledge and competencies may be only of interest to those already motivated and for whom education is a high priority. Internet use may reflect existing practices and interests rather than automatically becoming a tool for transforming practice.

CONSEQUENCES OF DIGITAL EXCLUSION

Experience with the Internet, if negative, can lead to a choice to effectively self-exclude from digital use. In this way, Internet use can be seen as being related to social inclusion. Dutton argues that the social implications are to reconfigure access by providing diversified models in public and private spaces (Dutton, 2004). There are certain suggested strategies for minimising exclusion that include the creation of conditions that improve equipment, education and resources, skills and support as well as changing the 'not for me' attitude (Doherty et al, 2003). "The provision of physical access by itself, however cheap it may be, is only the first step in overcoming digital exclusion. To take part in the Information Society, it is necessary to have the skills and the confidence to go online and a reason and motivation to make the effort" (Ferlander and Timms, 2004, p.9). This reemphasises the important role that education plays in refining Internet use amongst children and at face value would seem to imply that the provision of Internet access in school is important. Although it is highly desirable to provide access from school, some authors argue that for real inclusion "access means access from home" (Tambini, 2000, p. 21). Of course, financial differences limit the quality of internet access for children, but inequality in cultural capital (i.e. internet literacy, or the ability to use Internet constructively) may also be an inhibiting factor. Inequality in social capital (social support in using the Internet) can be a factor too although this could be more subtle than is first apparent. For instance, in ULT academies there is often a high desire of ethnic minorities and some single-parent families to provide access to the Internet as part of an ambition to succeed and busy middle-class children often use the Internet at a superficial level (i.e. for entertainment). However it is widely agreed that amongst the inhibiting factors are finances, education, parental ICT skills, community support, parents' attitudes and the nature of the informal learning environment at home. On the issue of physical access, Livingstone and Bovill see that "the more Internet access at home comes to be taken for granted by society, the more inadequate levels of access will serve to exclude some children and their families (Livingstone and Bovill, 2001, p. 22). As well as social and cultural capital, financial capital still is a major factor. As Tyler bluntly puts it, "if people must buy computers and pay for Internet access, then those who are initially advantaged are able to gain further advantage" (Tyler, 2002, p. 201). This is consistent with Livingstone and Bober's view that "providing domestic access to ICT may increase rather than decrease inequalities" (Livingstone and Bober, 2003, p. 28) although it appears at odds with Tambini's view. There is apparently still considerable scope for research in this matter.

CONCLUSION AND REFLECTIONS

Access to the Internet can be seen as a way of transferring power to the learner but it can also be used as means of achieving apparent productivity gains in education. Young sees further warning signals when he states that "the software and the communications companies behind the Internet…see the access model as generating a lucrative, new market for their products, and governments, for whom the access model appears as a way of cutting the costs of public education and of weakening what some see as the sectional power of professional or personal interests" (Young, 1998, p. 148). In terms of access and exclusion, some writers have seen the power lying firmly with the developers. Sassower states that "with the stroke of a pen someone like Microsoft's Gates can turn a thriving technological component of a research programme into obsolescence" (Sassower, 1995, p. 120). To extend this argument it can be seen that in order to access the richness of the Internet, the user needs the software; multi-media enabled with sound, video and graphics. The software drives the content that is

delivered on the Internet to a certain extent and many websites assume an increasing level of sophistication in the client system (browser, operating system and hardware specification). This is a practical consideration where the user must constantly ensure they have the appropriate systems to access the online material. This comes at a considerable recurrent financial cost. But it is not enough to provide the ICT and even just the technical skills. It is also important to consider how it is introduced in the educational context, including how to promote the use of technology that relates to a social context and peer group culture, including email and other collaborative online activities. Valentine says that "the fact that technologies, identities and peer-group relations transform and are transformed by each other might be regarded by children as offering a range of positive possibilities, rather than presenting a threat to their identities" (Valantine, 2002, p. 312). The issues discussed and illustrated in this paper have profound implications for the United Learning Trust academies programme. We must address the issue of physical access, perhaps looking at extended school hours, whilst acknowledging that patterns of usage may be different in public (school) and private (home) spaces. Our curriculum must include the tools for accessing information, including skills for identifying problems, finding resources, critically examining and analysing, synthesising ideas and making sound value judgements. There needs to be further development of the discussed literacies including metacognitive skills, technical skills and the evaluation of ideas and opinions. Again, on a practical level, advantage must be taken of converging technologies including television, telephony, cable and satellite communications and entertainment, the Internet. This may mean that physical access becomes less important than intellectual, social and academic skills and access. Many of the issues regarding children, the Internet and exclusion are centred on economic, educational, cultural and social factors. As well as providing physical access and tools as well as technical skills, we must be increasingly focussed on the higher level skills and literacies that will allow the children in our academies to use the Internet as a rich media resource, a tool with which to think and a gateway that they can use intelligently, discerningly and critically. By putting the student at the heart of the Internet experience rather than the equipment or the software, perhaps we can address in some the inequalities discussed in this essay.

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